Figure 1

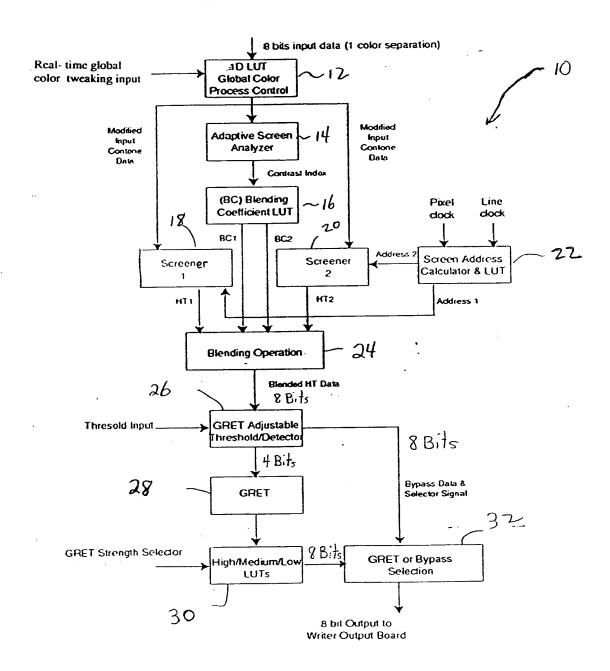
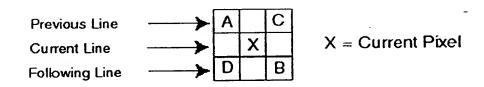
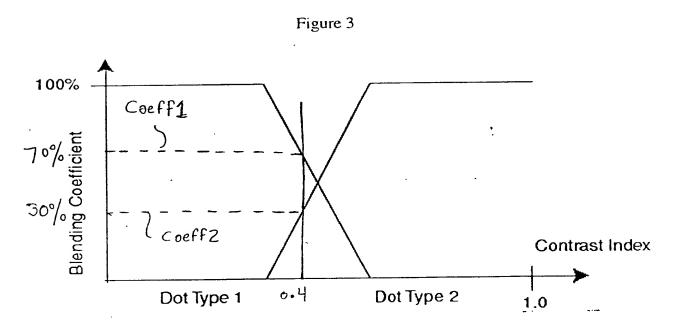


Figure 2

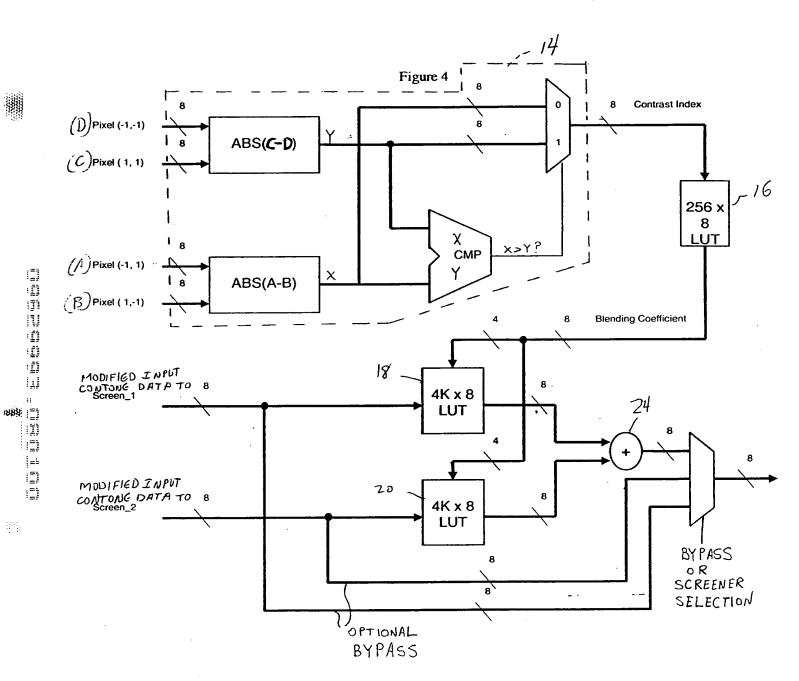


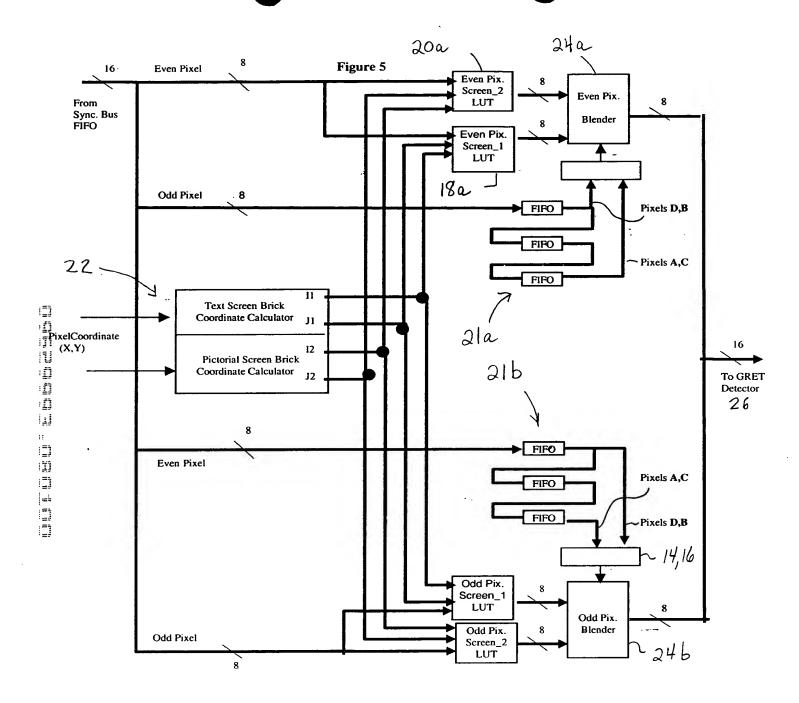
Contrast Index = Max (IA-BI, IC-DI)



Rendered Dot Value = (Dot1_value) x Coeff1 + (Dot2_value) x Coeff2)

Coeff1 + Coeff2 = 1.0





Commission of the second secon

GOSBACTER CONTRACTOR OF CONTRACTOR STATE OF CONTRACTOR OF

_
=
O
Ξ
æ
≌
S
_
=
_
_
⊢
_
_
_
ġ.
ā
_
O
/Ā
u)

Plane = 255

															_	1			
18	0	0	0	0	0	0	0	0	0	0	0	0	296	255	255 \	125	0	0	0
17	0	0	0	0	0	0	0	0	235	253	255	255	255 "	255	255	255	0	0	0
9	0	0	0	0	235	253	255	255	255	255	255	255	255	255	255	255	þ	0	0
15	9	253	255	255	255	255	255	255	255	255	255	255	255	255	255	255	帮	0	0
4	9	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	0	0
13	0	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	6	0
12	0	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	þ	0
=	0	4	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	155	0
9	0	9	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	0
თ	0	0	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	þ
∞ .	0	0	153	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	4
7	0	0	4	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255
ဖ	0	0	0	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255
2	0	0	0	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255
4	0	0	0	133	255	255	255	255	255	255	255	255	255	255	255	255	255	\255	855
က	0	0	0	4	255	255	255	255	255	255	255	255	255	255	\$25	285	Ø	6	0
7	0	0	0	0	255	255	255	255	255	255	255	\$62	محر	6	0	0	0	0	0
-	0	0	0	0	135	255	ッ	\$52	مح	6	0	0	0	0	0	0	0	0	0
0	0	0	0	0	155	6	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	_	7	က	4	വ	9	7	œ	တ်	9	Ξ	12	13	14	15	16	17	18

Fig. 6(a)

																4				
<u>€</u>	0	0	0	0	0	0	0	0	0	0	0	0	٥	168 186	117	S	0	0	0	
17	0	0	0	0	0	´0	0	0	و	120	155	9	<u>.</u> 98	233	248	187	0	0	0	
16	0	0	0	0	٦	Ŕ	182	22	48	204	253	209	156	219	241	83	þ	0	0	
15	9	₩	187	ဆ	35	163	253	228	155	202	248	132	0	54	168	32	f	0	0	
4	4	117	248	241	168	182	243	1 81	22	27	152	2	0	13	182	163	B	0	0	
13	0	199	233	219	54	13	117	116	0	0	134	194	84	117	243	253	182	þ	0	
42	0	þ	77	156	0	0	<u>8</u>	212	104	86	225	255	212	116	181	228	22	þ	0	
Ξ	0	4	4	209	132	2	194	255	235	133	164	235	104	0	22	155	48	4	0	
5	0	9									0							1	0	
თ	0	0	8	204	202	27	0	88	126	0	0	157	225	134	152	248	253	155	þ	
ω	0	0	þ	48	155	52	0	104	235	164	133	235	255	194	2	132	509	4	f	
7	0	0	4	22	228	181	116	212	255	225	86	104	212	æ	0	0	156	88	d	
9			- 1								0								1	
, ro	0	0	0	þ	163	182	5	0	2	152	27	52	181	243	182	168	241	248	117	
4	0	0	0	f	32	168	54	0	132	248	202	155	228	253	163	32	83	187	32	
က	0	0	0	4	83	241	219	156	209	253	204	48	22	182	2	<u>°</u>	م	6	0	
8				1							120			_	_					
-	0	0	0	0	42	117	166	0	مح	6	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	
128	0	-	~	က	4	ည	9	7	ω	თ	9	Ξ	12	<u>5</u>	4	5	9	17	8	
Plane=																				

Fig. 6(b)

															_	~				
8	0	0	0	0	0	0	0	0	0	0	0	0	و	6	6	4	0	0	0	
17	0	0	0	0	0	0	0	0	ح	6	6	0	0	8	46	0	0	0	0	
16	0	0	0	0	ح	6	6	0	0	0	64	0	0	9	11	0	þ	0	0	
15	9	6	0	0	0	0	51	4	0	0	24	0	0	0	0	0	f	0	0	
4	4	0	34	ဓ	0	0	9	വ	0	0	0	0	0	0	0	0	9	0	0	
55	0	0	42	=	0	0	0	0	0	0	0	0	0	0	54	63	0	þ	0	
12	0	þ	0	0	0	0	0	0	0	0	0	88	0	0	0	0	0	þ	0	
=	0	f	0	0	0	0	0	89	<u>ნ</u>	0	0	0	0	0	0	0	0	4	0	
9	0	4	0	47	42	0	0	0	0	0	0	0	0	0	0	ဖ	15	0	0	
6	0	0	6	0	0	0	0	0	0	0	0	0	7	0	0	1 0	49	0	þ	
∞	0	0	þ	0	0	0	0	0	16	4	0	0	29	0	0	0	0	0	þ	
7	0	0	þ	0	=	9	0	0	22	5	0	0	0	0	0	0	0	Ö	4	
9	0	0	0	0	36	32	0	0	0	0	0	0	0	0	0	0	12	3	0	
വ	0	0	0	þ	0	0	0	0	0	0	0	0	0	42	0	0	57	33	0	\
4	0	0	0	f	0	0	0	0	0	33	တ	0	0	42	0	0	0	0	0	ا_
က	0	0	0	4	0	23	20	0	0	32	9	0	0	0	0	9	6	6	0	
7	0	0	0	0	6	54	22	0	0	0	0	9	Ø	6	0	0	0	0	0	
•	0	0	0	0	f	0	0	9	Ø	6	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	

Plane=

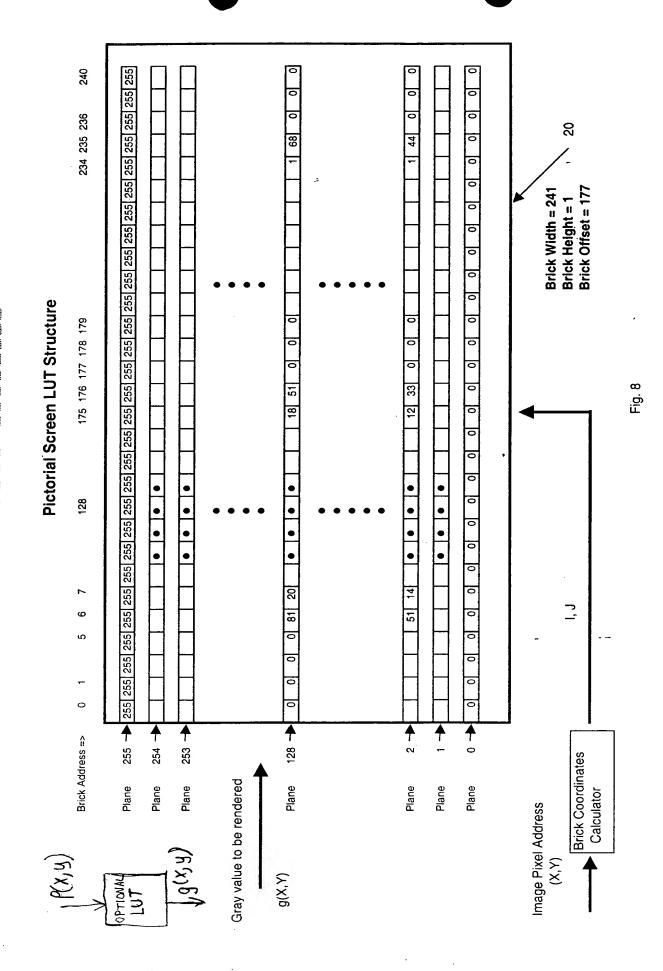
N

3. Brick Offset = 177

2. Brick Height = 1

1. Brick Width = 241

255 255 255 255 255 255 255 255		5000003	8000000
255 255 255 255 255 255 255 255		00-00080	00-00020
255 255 255 255 255 255 255 255 255		0%000%400	0000000000
255 255 255 255 255 255 255 255 255		25 0 0 0 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	87 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
255 255 255 255 255 255 255 255 255		101° 00081 0000	800057000
255 255 255 255 255 255 255 255		00000000	00000000
255 255 255 255 255 255 255 255 255		0000000000	00000000
255 255 255 255 255 255 255 255		- 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100041004
255 255 255 255 255 255 255 255		-00027007-	-0088 -0058
255 255 255 255 255 255 255 255 255		0 0 5 4 0 0 0 - 0	000000000000000000000000000000000000000
255 255 255 255 255 255 255 255 255		0 0 4 0 0 0 0 0 0	00200000
255 255 255 255 255 255 255 255		0000000	00000000
\$ \$2(\$ 2) \$2 \$2 \$2 \$2(\$ 2) \$2 \$2 \$2		0002000820	၀၀၀က်၀၀ 🛭 🖰 ဝ
255 255 255 255 255 255 255 255 255 255		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	, ဝဝဓ္ကမဝဝဣ၈ဝ
255 255 255 255 255 255 255 255 255		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 2 4 5 0 0 0 2 5 0 0
255 255 255 255 255 255 255 255 255	E.	0 0 0 0 0 0 0 0 0	9,0000000
255 255 255 255 255 255 255 255 255 255	7.	3500000-0	15 2000000000000000000000000000000000000
255 255 255 255 255 255 255 255 255 255	T.	-000000000	-00000400
255 255 255 255 255 255 255 255 255 255		0 9 0 0 0 9 0 0	000000-00
255 255 255 255 255 255 255 255 255 255		20 17 0 0 34 35 0 0	4110022000
255 255 255 255 255 255 255 255 255 255		800-80000	12 0 0 1 4 0 0 0 0
255 255 255 255 255 255 255 255 255 255		00000000	0000000
255 255 255 255 255 255 255 255 255 255		00000000	00000000
255 255 255 255 255 255 255 255 255 255		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.3
255 255 255 255 255 255 255 255 255 255		0 0 0 18 0 0 23 23	000000000000000000000000000000000000000
255 255 255 255 255 255 255 255 255 255	ας.	000000	2 0 0 1 4 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Plane 255 255 255 255 255 255 255 255 255 25	Diana 198	00 80 00 00 4	Plane 0 35 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
_	_	-	_



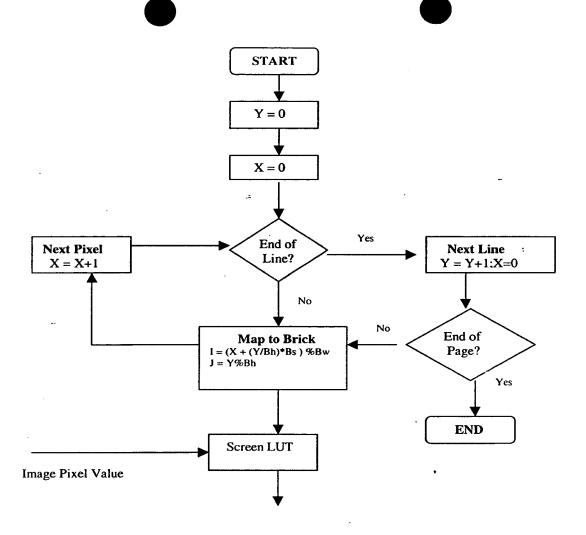


Figure: Screening Operation Flow Diagram (X,Y: Image Pixel address; I,J: Brick address) (Bw: Brick width; Bh: Brick height; Bs: Brick offset)

Example of 2x2 size of Text screen tile

1. Brick Width = 2

2. Brick Height = 2

(Screen ruling : 300 LPI

3. Brick Offset = 0

Screen Angle: 0)

Plane 255

255 255

Plane 128

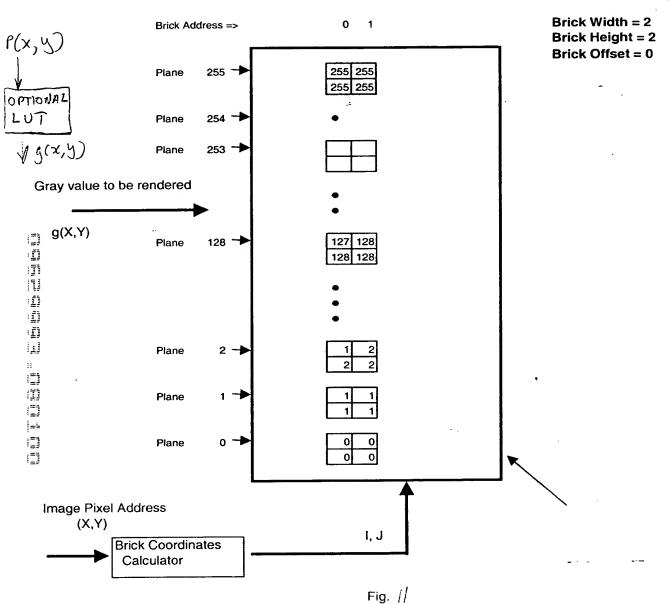
128	128
127	128

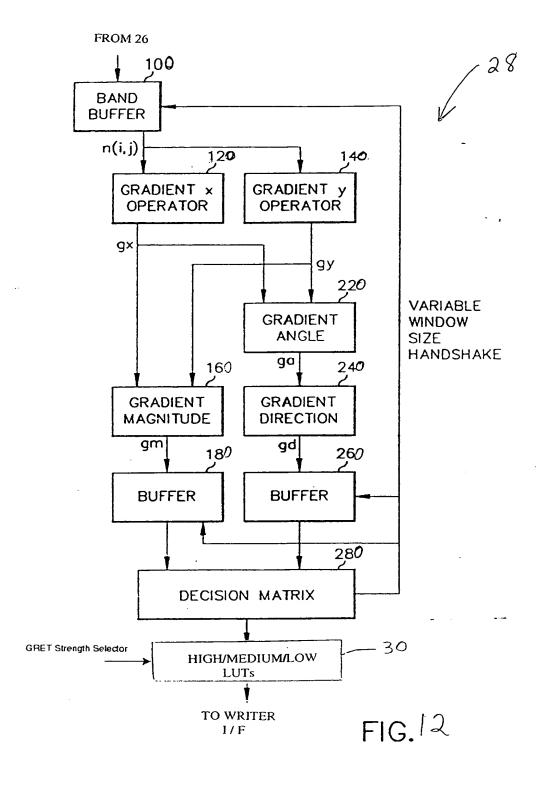
Plane 2

2	7
1	2

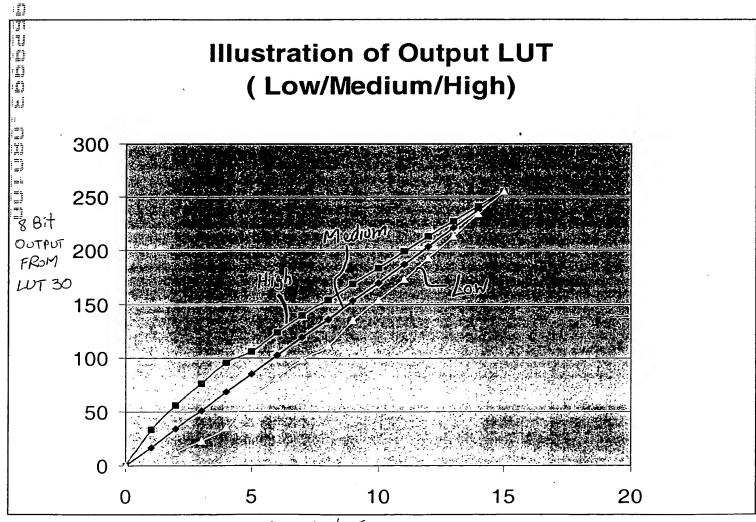
1-1g. 10

Text Screen LUT Structure





	Medium	High	Low
0	0	0	0
1	17	33	4
2	34	56	12
3	51	76	23
4	68	95	35
5	85	106	65
6	102	123	81
7	119	139	98
8	136	154	111
9	153	169	135
10	170	184	154
11	187	199	173
12	204	213	193
13	221	227	213
14	238	241	234
15	255	255	255



4 Bit Output From GRET

Fig.13

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	255	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	0	0	0	255	0	0	0	0	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	0	0	255	0	0	0	0	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	255	0	0	0	0	0	0	0	0		255	0	0	0	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	255		0	0	0	0	0	0	0	0	255	0	0	0	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	255	S	0	0	0	0	0	0	0	255	0	0	0	0	0	255	0	0
0	0	0	0	0	0	o 	0	0	0	0	0	0	0	0	255	0	0	0	0	0	0	0	255	0	0	0	0	0	255	0	0
0	255	0	0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0		255	0	0	0	0	255	0	0
0	S	255	S	0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	255	0	0	0	0	255	0	0
0	0	0	255	S	0	0	0	0	0	0	0	0	0	0	0	0	255	0	0	0	0	0	0	255	0	0	0	0	255	0	0
0	0	0	0	255	255	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	255	255	0	0	0	255	0	0
0	0	0	0	0	255	255	S	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	255	0	0	0	255	0	0
0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	0	0	0	0	255	0	0	0	0	0	255	0	0	0	255	0	0
0	0	0	0	0	0	0	0	S	2		0	0	0	0	0	0	0	0	25	255	0	0	0	0	25	0			25		0
0	0	0	0	0	0	0	0	0	ഹ	255	255	0	0	0	0	0	0	0	0	255	0	0	0	0	255		0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	255	Š	0	0	0	0	0	0	0	255	255	0	0	0	0	255	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	255		0	0	0	0	0	0	0	255	255	0	0	0	255	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	255	255	S	0	0	0	0	0	0	255	255	0	0	255	S	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0		255	0	0	0	255	0	255	0	0
0	255	S	0	0	0	0	0	0	0	0	0	0	0	0	0	255	25	25		0	0	0	255	255			25		255		0
0	0	255	25	25	255	25	_	0	0	0	0	0	0	0	0	0		7	25	0	0	0	0	25	0	_	255		255	_	0
0	0	0	0	0	0	255	255	255	255	0	0	0	0	0	0	0	0	0	255	255	0	0	0	255	255	0	255	0	255	0	0
0	0	0	0	0	0	0	0	0		255				0	0	0	0	0	0	255	255	255	0	0	255	0	255		255	0	0
													25	25	25	25				0		25	2.5	25	25		25		25		
																25	25	25		0					25		25		25		
																		25	23	255	2	25	23	25	2	25	2		25		
																				0							25		25		
0	S	S	S	S	S	Ŋ	S	L)	ഹ	വ	ഗ	S	ഗ	S	S	ഗ	ഗ	ഗ	S	255	ഗ	ហ	ເນ	וט	ยา	L)	បោ	L.	L()	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

F19,14

GRET Output with LUT: Medium strength

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
0	0	0	0	0	0	0	0	0	0	0	255	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	0	o ::	0	255	0	0	0	0	0	0	255	0	•
0	0	Ö	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	0	0	255	136	0	0	0	0	0	255	0	•
0	0	0	0	0	0	0	0	0	0	0	0	136	255	136	0	0	0	0	0	0	0	204	204	0	0	0	0	0	255	0	•
0	0	0	0	0	0	0	0	0	0	0	0	0	255	ഹ	0	0	0	0	0	0	0	136	255	0	0	0	0	0	255	0	•
0	0	0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	119	255	119	0	0	0	0	255	0	•
0	0	0	0	0	0	0	0	0	0	0	0	0	0	136	255	136	0	0	0	0	0	0	255	136	0	0	0	0	255	0	•
0	255	0	0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	•	0	0	0	204	204	0	0	0	0	255	0	•
0	255	255	S	0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	136	255	0	0	0	0	255	0	•
0	0	0	255	S	0	0	0	0	0	0	0	0	0	0	0	136	255	136	0	0	0	0	0	255	136	0	0	0	255	0	•
0	0	0	0	255	255	136	0	0	0	0	0	0	0	0	0	0	255	25	0	0	0	0	0	204		0	0	0	255	0	•
0	0	0	0	0	25	25	25	0	0	0	0	0	0	0	0	0	0	25	255	0	0	0		136	25	0	0	0	255	0	•
-	-	-	-	-	-	7	25	25	-	0	0	0	-	-	-	-	0	13	~	136	0	0			25	119	0	0	255	0	
<u> </u>	•	0	0	0	0	-	102	255			0	•	-	0	0	-	-	0		204		0			255		٥	0	255	0	•
0	0	0	0	0	0	0	_			6 255	255	۰۰	о 0	0	0	_	_		0 136	25	5 136	~	0	0	204	5 204	0		255	_	`
_	0	0	0	0	0	0	0	0	0	13	2 25	5 25	'n	S S	0	0	0	0	0	0 25	5 25	5 10,	0	0	13	25		0	5 25	0	
_	0	_	0		0	0	·	0	·		10	0 25	5 25	5 13	Š	·	0	·	0	0	0 25	5 25	S	_ _	0	4 255	4	0	5 25	0	
0	0		0	0	0	0	0	0	0	0	0	0	25	6 25	5 25	5	9	0	0	0	0	6 25	5 25	9	0	6 20	ഹ	0	5 25	0	
0	2			σ	0	0	0	0	0	0	0	0	0	0 13	0 25	5 2	5 13	'n	0	0	0	0 13	4 25	4 13	0	0 13	5	0	5 25	0	
0		വ		ស	ιΩ	14	9	0	0	0	0	0	0	0	0	0 25	16 25	55 25	55	0	0		96 20	55 20	9	0	55 25	0	55 25	0	•
0	0	0 25	0 25	9 2		14 20	55 13	55	4	98	6	0	0	0	0	0	0 13)2 25	55 25	55	98	0	0 13	55 25	55 13	0	55 25	0	55 25	0	•
0	0	0	0	0 11	0 13	0 20	0 25	Ó	4 2	55 13	55 11	55	4	98	0	0	0	0 10	0 25	5 2	55 13)4	0	0 25	5 2	0	55 25	0	55 25	0	•
0	0	0	0	0	0	0	0		7	7	2	~	C;		55	04	36	0		2		7	55		55 25		55 25		55 25	0	(
																														0	
																														0	
																											55	0		0	
0	55	55	55	55	52	55	55	55	55	255	55	22	55	55	55	55	55	52	52	55	55	55	55	55	55	55	55 2	55	55 2	0	c
0																														0	<

GRET Output with LUT: Low strength

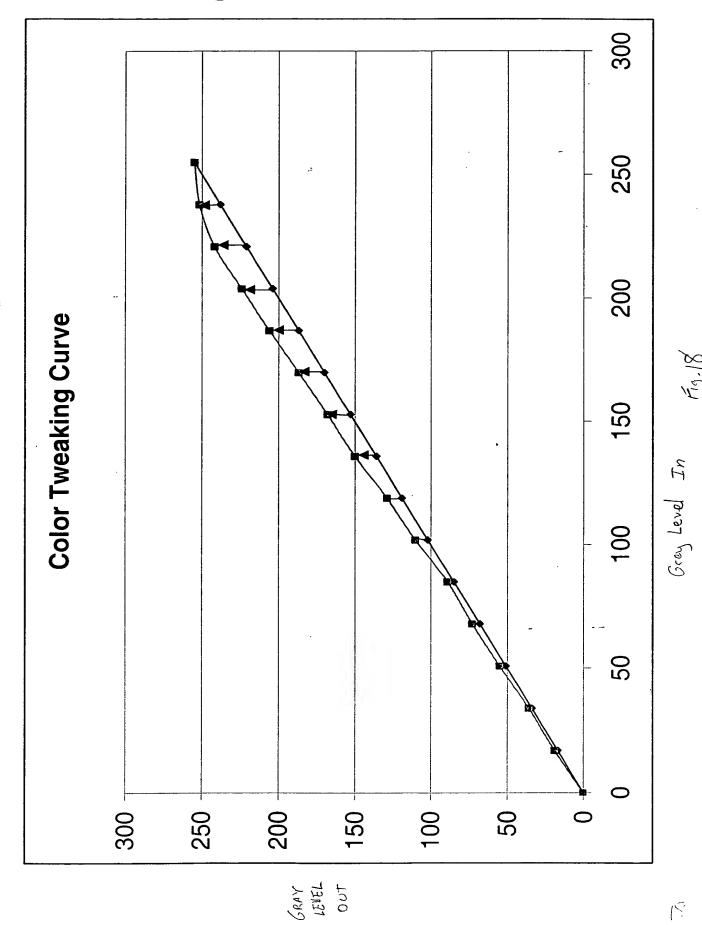
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	255	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	0	0	0	255	0	0	0	0	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0		255	0	0	0	0	0	0	0	0	255	116	0	0	0	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	116	255	116	0	0	0	0	0	0	0	193	193	0	0	0	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	0	116	255	0	0	0	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	98	255	98	0	0	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	255	116	0	0	0	0	0	0	255	116	0	0	0	0	255	0	0
0	255	0	0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	193	193	0	0	0	0	255	0	0
0	255	255	255	0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	116	255	0	0	0	0	255	0	0
0	0	0	255	S	0	0	0	0	0	0	0	0	0	0	0	116	255	116	0	0	0	0	0	255	116	0	0	0	255	0	0
0	0	0		255		116	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	193	193	0	0	0	255	0	0
0	0	0	0	0	255	255	255	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	116	255	0	0	0	255	0	0
0	0	0	0	0	0	116	255		0	0	0	0	0	0	0	0	0	116	255	116	0	0	0	98	255	98	0	0	255	0	0
0	0	0	0	0	0	0	81	255	255	116	0	0	0	0	.0	0	0	0	193	193	0	0	0	0	255	116	0	0	255	0	0
0	0	0	0	0	0	0	0	0	255	255	255	0	0	0	0	0	0	0	116	255	116	0	0	0	193	193	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	116	255	255	0	0	0	0	0	0	0	255	255	81	0	0		255	0	.0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	81	255	255	116	0	0	0	0	0	0		255	0	0	0	255	116	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	S	S	255	0	0	0	0	0	0	255		0	0	193	193	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	255	255	116	0	0	0	0	116	255	116	0	116	255	0	255	0	0
0	255	255	116	98	0	0	0	0	0	0	0	0	0	0	0		S	255	0	0	0	0	193	193	0	0	255	0	255	0	0
0	0	S	S	S	255	193	116	0	0	0	0	0	0	0	0	0	116	255	255	0	0	0	116	255	116	0	255	0	255	0	0
0	0	0	0	98	116		255		193		98	0	0	0	0	0	0	81		255	116	0	0		255	0	255	0	255	0	0
0		0						7	19	25	25	25	13	11						25	7	13			255		25		25	0	
																													255		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	193	255	193	116	0	0	0	0	0	255	0	255	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	193	255	255	255	255	255	255	255	255	255	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	255	0	255	0	0
								_	_		Ŋ	S	Ŋ	Š	Š	Š	55	5	5	55	5	S	25	35	55	55	5	5	'n	0	0
0	ß	S	S	S	2	S	2	255	S	S	S	25	2	2	2	2	2	2	2	2	Š	~	ď	2	2	~	ď	2	25		
	25	25	25	25	25	25	25	25	25	25	25	7	~	7	~	~	2	2	7	2	7	~	7	7	2	~	~	7	0 25	0	0

F1g. 16

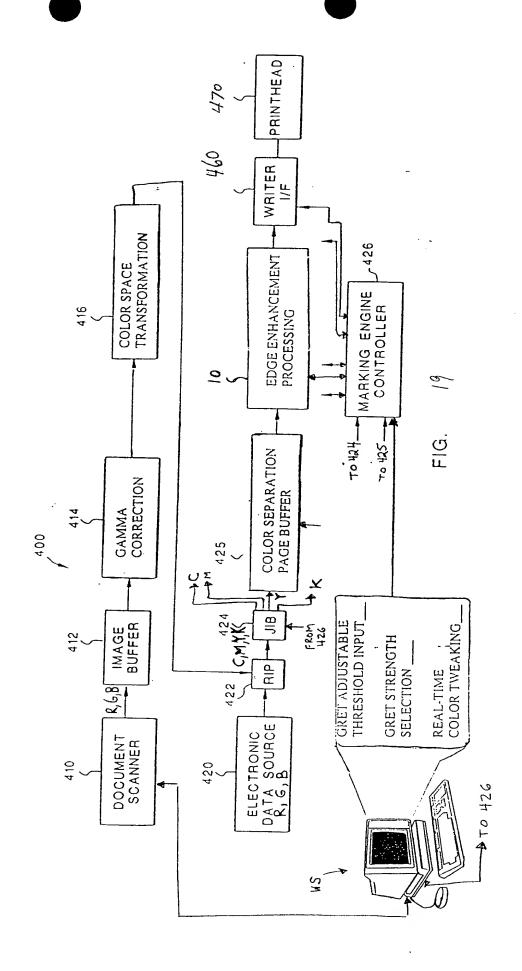
GRET Output with LUT: High strength

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	255	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	0	o :	0	255	0	0	0	0	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0		S	255	0	0	0	0	0	0	0	0	255	154	0	0	0	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	154	255	154	0	0	0	0	0	0	0	213	213	0	0	0	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	0	154	255	0	0	0	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	139	255	139	0	0	0	0	255	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	154	255	154	0	0	0	0	0	0	255	154	0	0	0	0	255	0	0
0	255	0	0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	0	213	213	0	0	0	0	255	0	0
0	255	255	255	0	0	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	154	255	0	0	0	0	255	0	0
0	0	0	255	S	0	0	0	0	0	0	0	0	0	0	0	ß	255	154	0	0	0	0	0	255	154	0	0	0	255	0	0
0	0	0	123	255	255	154	0	0	0	0	0	0	0	0	0	0	255	255	0	0	0	0	0	213	213	0	0	0	255	0	0
0	0	0	0	0	S	255	S	0	0	0	0	0	0	0	0	0	0	S	255	0	0	0	0	15	255	0	0	0	255	0	0
0	0	0	0	0	0	1	255	7	0	0	0	0	0	0	0	0	0	154	255	154	0	0	0	139	255	13	0	0	255	0	0
0	0	0	0	0	0	0	~	25		15	0	0	0	0	0	0	0	0	213		0	0	0	0	255		0	0	255	0	-
0	0	0	0	0	0	0	0	0	255	255	25	0	0	0	0	0	0	0		255		0	0	0	213		0	0	255	-	-
0	0	0	0	0	0	0	_	_	_	S	255	25	•	0	-	-	-	-	• -	255	25		0	0	154	25	0	0	255	0	0
0	0	0	0	0	0	0	0	0	-	-	123	~	255	-		-	-	-	-	-	255	255		-	0	255	154	-	255	_	_
-	0	0	-	0	0	0	0	0	0	0	0	0	255	25	25	0	0	0	0	0	0	25	252	-	0	213	5 213	0	5 255	0	°
0			-	0	0	0	0	0	0	0	0	_	0	154	255	25	5 154	S.	_	0	0	154	255	154	_	154	5 255	_	5 255	_	_
0	255			5 139	·0	~	-	_	0	0	0	_	_	_	_	255	4 255	5 255		0	_	_	4 21	213	_	_	5 255	_	5 25	0	0
_	0				1 255	3 213	154		~	4	_	_	_	_	_	_	154	3 25	3 25	2		_	154	5 25	5 154	_	5 25	0	5 25	_	_
_	_	_	0		154	213	255	1 255	3 213	5 154	5 139		ω	_	0	0	0	0 123	255	5 255	5 154	<u>۔</u>	0		5 259	0	5 25	0	5 25	0	0
0	0	_	0	_	0	0	0			0 25						m	57	_	0		4 25		10	10	5 25	0	5 25	_	5 25	0	0
	0													0 25													S	0	S	0	
														0			4 255								25		25		25		
																														0 0	
	'n	ر د	Ŋ	2	Ŋ	5	S	Ŋ	2	'n	5	Ŋ	ι.	S	ഗ	'n	'n	ഹ	2	Z)	Z)	Ŋ	เร	ഗ	ហ	ภ	5 25	S	5 25	0	
	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	2	25	25	23	25	25	25	0	
																														0	

Fig. 17



R



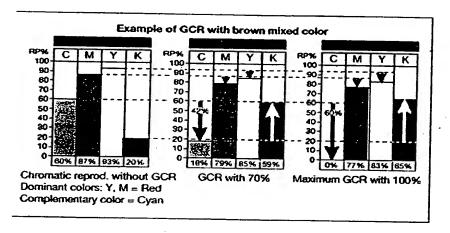


Fig. 20(a)

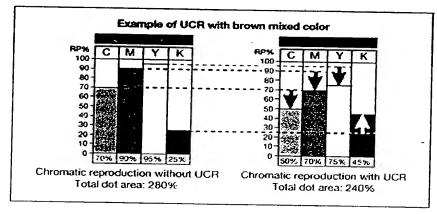


Fig. 20 (b)

Illustration of tile structure and brick structure

Screen Tile Information:

Single cell C1 with one tile
 Screen Angle = 45 degree

3. Screen ruling = 141 LPI @ 600d pi

Screen example: 141 LPI@600 dpi, 45 degree

Step1:

Tile structure

Х	Х	Х	х	х	х	х
Х	х	Х	(C1)	Х	х	X
Х	х	FQ1 6	(C1)	€C10	X	х
X	C1	C18	C10	C1	C1	х
X	∴C1:ặ	-C1	*C1	ű	.C1	Х
х	х	C1	€C1	C1	X	х
Х	х	Х	(C1):	х	X	х
Х	Х	х	0	х	Х	Х

Label pixel sequence in the tile

119-01

0	0	0	0	0	0	0
`0	0	0	類1数	0	0	0
0	0	2.	震3章	4	0	0
0	6:5 ₺	6.4	7.2	≥ 8 ≥	. 95	0
0	10 3	2013	\$12	13%	414 £	0
0	0	315 4	16	割7岁	0	0
0	0	0	218	0	0	0
0	0	0	0	0	0	0

Step3:

Step2:

Fill up image Plane with tile

	_											
1	10	55.11	瀛12	1,3	. 14	1	. 10	> 11	[2]	3,13	; 14	1
3	4	15	16	17	2	3	4	15	્ર16	17	" ₹2	3
~7	8	9	18	5	6	7.	8	9	18	***5	6	>7
12	13	14	. 1	10	11	1,2	13	14	1	10	.11	. 12
16	17	·∵∴2	3	4	15	16	.17	2	3	4	15	16
18	5	:∷:6	7	8	9	1,8	- 5	6	3 7	8	_ < 1.9	18
-1	10	311	. .12	13	14	.,1	10	111	12	:13	14	1
3	4	15	16	17	. 2	(3	- 4	. 15	16	17	2	3
7.	8	. 9	%18	5	6	7	8	9	18	5	6	7
12	13	14	[] ⋅1	10	11	12	13	14	% -1	10	<u>į</u> 11	12
16	17	2	3	4	15	16	· 17	2	<u>∰</u> 1-3	- 4	15	16
18	5	. 6	7	8	9	18	5	- 6	∮ , 7	- 8	9	18
- 1	10	第11	, 12	13	14	1	10	11	12	713	14	1
3	4	. 15	ृ:16	17	2	.3	4	15	16	317	2	3
: 4.7	8	: 9	18	5	6	7	5 8	9	. 18	1.5	6	7
12	13	* 14	\$1.1 ₁	10	11	12	13	14	3 2.1	410	:11	12
16	17	2	3	4	15	16	17	2	3	4	15	16

Fig. 21-3

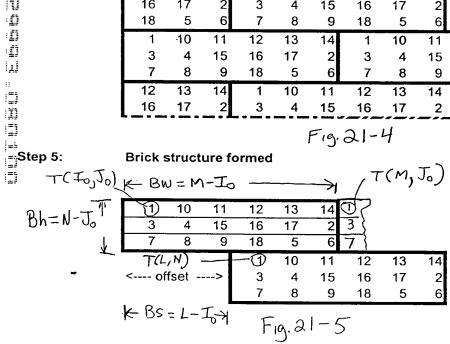
Step 4: Found repeating rectangle blocks in the image plane

1	10	11	12	13	14	1	10	11	12	13	14	1
3	4	15	16	17	2	3	4	15	16	17	2	3
7	8	9	18	5	6	7	8	9	18	5	6	7
12	13	14	1	10	1.1	12	13	14	1	10	11	12
16	17	2	3	4	15	16	17	2	3	4	15	16
18	5	6	7	8	9	18	5	6	7	8	9	18
1	10	11	12	13	14	1	10	11	12	13	14	1
3	4	15	16	17	2	3	4	15	16	17	2	3
7	8	9	18	5	6	7	8	9	18	5	6	7
12	13	14	1	10	11	12	13	14	1	10	11	12
16	17	2	3	4	15	16	17	2	3	4	15	16
18	5	6	7	8	9	18	5	6	7	8	9	18
1	-10	11	12	13	14	1	10	11	12	13	14	1/
3	4	15	16	17	2	3	4	15	16	17	2	3,
7	8	9	18	5	6	7	8	9	18	5	6	7
12	13	14	1	10	11	12	13	14	1	10,	11	12
16	17	2	3	4	15	16	17	2	3	4	15	16

Fig. 21-4

[]

Brick structure formed



Brick information

- 1. Brick width = $6 \approx \beta w$ 2. Brick Height = $3 \approx \beta h$
- 3. Brick Offset = 3 = BS

•	
Level	2

106	0	0	0	0_	0
0	0	0	0	0	0
0	0	0	0	0	0
	106 0 0	106 0 0 0 0 0	106 0 0 0 0 0 0 0 0	106 0 0 0 0 0 0 0 0	106 0 0 0 0 0 0 0 0 0 0 0 0 0

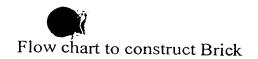
Level 128

ı	255	231	0	0 .	0	231
Ì	255	231	0	0	0	231
	220	99	99	220	100	100

Level 255

255	255	255	255	255	255
255	255	255	255	255	255
255	255	255	255	255	255

Fig. 21-6





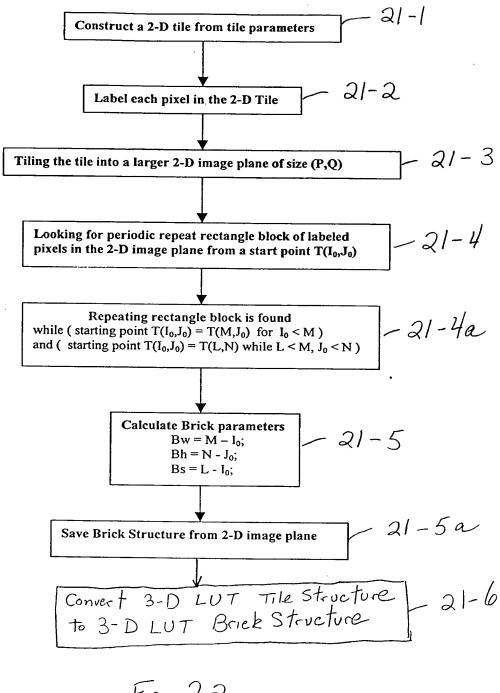


Fig. 22

3creen #2: 171 lpi, 0 degree

Tile structure

C18	≨C1:	C18	%C14	£€2∛	€C2	€C28
3C18	C1	C12	£C1	G24	C2	C2
C18	€C1	C13	(C18	aC27	IG2	(C2)
FG35	(C8)	C 3	Q#	62 2	C2	262
(C3)	:63	(C3)	TG	(C)	YOM	(Ç.)
(C3)	(C3)	(63)	C.	UÇM	10/4L	(Ç.)
C3	7C3	G3	CA.	CAR	SIGN	10/12

Screen Information:

- 1. Four cells (C1,C2,C3,C4) with one tile
- 2. Each cell has different shapes
- 3. Different cell sizes among cells
- 4. Screen Angle = 0 degree
- 5. Screen ruling = 171 LPI @ 600dpi
- 6. Brick width = 7
- 7. Brick Height = 7
- 8. Brick Offset = 0

Dot type choices:

(full,partial, mixed, distributed dot type)

Brick structure

E1	·S1	E1
E2	S2	E2
E3	S3	E3
E4	S4	E4
E5	S5 .	· E5
E6	S6	E6
E7	S7	E7
E1	S1	E1
E2	S2	E2
E3	S3	E3
E4	S4	E4
E5	S5	E5
E6	S6	E6
E7	S7	E7
	E2 E3 E4 E5 E6 E7 E1 E2 E3 E4 E5	E2 S2 E3 S3 E4 S4 E5 S5 E6 S6 E7 S7 E1 S1 E2 S2 E3 S3 E4 S4 E5 S5

S1,S2,..S7: start of brick pixel

E1,E2,..E7: end of brick pixel

Fig. 23 (a)

3creen #2: 171 lpi, 0 degree

Gray level = 2

÷ 0	0 25	6 0	.0	题端0	疑緊 0	33 0
;; · 0	- 31	₹518	. ⊹0	230	242	68.10
<u>₹</u> : 0	15	多8	0	3	20	10
20	新数 0	33 00	27.0	E	2 30	数数(0
3480	8	5	0			(£
2310	38	21	(1)			
整整0	920	90	9,11.9			9

Dot type: distributed dot type

Brick structure

0	0	0	0	0	0	0
0	31	18	0	7	42	0
0	15	8	0	3	20	0
0	0	0	0	0	0	0
0	8	5	0	2	11	0
0	38	21	0	8	51	0
0	0	0	0	0	0	0

1. Brick width = 7

2. Brick Height = 7

3. Brick Offset = 0

Fig. 23(b)

Screen #2: 171 lpi, 0 degree

Gray level = 128

20	164	83	7 :./5	為83	3164	i \$20
164	255	3229	<i>≋</i> 132	\$223	第255	灣164
83	₹229	%163	151	§159	233	9883
2 5	132	2851	AND 1	数51	3132	起35
83	\$223	(59	1261	3 (41)	224	283
164	255	233	B 222	24	250	E 64
20	¥164	選83	448 0	1985	62	20

Dot type: distributed dot type

Brick structure

Г	20	164	83	5	83	164	20
	164	255	229	132	223	255	164
	83	229	163	51	159	233	83
	5	132	51	0	51	132	5
	83	223	159	51	158	224	83
	164	255	233	132	224	255	164
	20	164	83	5	83	164	20

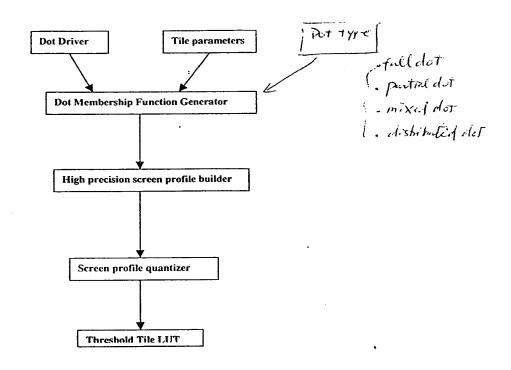
1. Brick width = 7

2. Brick Height = 7

3. Brick Offset = 0

Fig. 23(c)

Flow Chart to Construct a Threshold LUT of a Tile



16x16 dot size Driver

```
161 195 219
                                                                   250 255
256 245
         240 224
                   204
                        168
                            136
                                   92
                                        85
                                           129
                                                              233
                                                     181 209
                                                              229
                                                                   241 248
252 244 232 208 188
                        160
                             116
                                   84
                                        73
                                           109
                                                153
                                                              213 225
236 228 216 192 176
                       144
                             108
                                   80
                                        69
                                           101
                                                137
                                                     169
                                                         197
                                                                        237
217 212 200 180
                  152
                        120
                             100
                                   63
                                        55
                                             93
                                                121
                                                     145
                                                         177
                                                              189
                                                                  205 221
                                             51
                                                     125
                                                         149
193
    184
         172
              148
                   128
                         58
                              46
                                   39
                                        35
                                                 67
                                                              173
                                                                   185
                                                          117
    156
         140
              124
                    66
                         42
                              30
                                   22
                                        19
                                             31
                                                 43
                                                      59
                                                              141
                                                                   157
                                                                        165
164
    112
         104
               96
                    50
                         26
                              14
                                    6
                                        11
                                             15
                                                 27
                                                      47
                                                           97
                                                              105
                                                                   113
                                                                        133
132
          72
               54
                    34
                         18
                              10
                                    4
                                         3
                                              8
                                                 23
                                                      37
                                                           61
                                                                77
                                                                     81
                                                                          89
      76
 88
                    38
                         24
                               7
                                    2
                                         1
                                             12
                                                 17
                                                      33
                                                           53
                                                                70
                                                                     74
                                                                          87
          78
               62
 90
      82
                              16
                                    9
                                         5
                                                  25
                                                      49
                                                           95
                                                              103
                                                                   111
                                                                        131
         106
               98
                    48
                         28
                                             13
134
    114
                                   20
                                             29
                                                  41
                                                      65
                                                         123
                                                              139
                                                                   155
         142
                    60
                         44
                              32
                                        21
    158
              118
166
                                                     127
                                                          147
                                                              171
                                                                   183
                                                                        194
                              52
                                   36
                                        40
                                             45
                                                  57
         174
              150
                   126
                         68
202
    186
         190
                                             99
                                                     151
                                                          179
                                                              199
                                                                   211
                                                                        218
              178
                   146
                        122
                              94
                                   56
                                        64
                                                119
222
    206
                                                     175
                                                          191
                                                              215
                                                                   227
                                                                        235
              198
                   170
                        138
                             102
                                   71
                                        79
                                           107
                                                143
238 226 214
                                                                   243
                                                     187 207
                                                              231
                             110
                                   75
                                        83
                                           115
                                                159
                                                                        251
246 242 230 210
                   182
                       154
                                        91 135 167 203 223 239 247 253
254 249 234 220 196 162 130
                                   86
```